

PATENTS
Attorney Docket No. CEO-012.02

IN THE CLAIMS:

1. (Currently amended) A method for operating a data classifier, the method comprising:
providing test input data elements and corresponding test output data elements,
providing the test input data elements to a data classifier to generate result output data elements,
generating measures of difference based on differences between each test output data element and each corresponding result output data element,
associating the measures of difference with categories corresponding to different values of measures of difference, and
based on the number of measures of difference associated with the categories,
generating a performance measure of the data classifier.
2. (Cancelled)
3. (Currently amended) The method of claim 2 1, wherein generating a performance measure further includes:
associating the categories with weights,
for each category, generating a product based on the weight and the number of measures of difference associated with the category, and
generating a sum of the products.
4. (Currently amended) The method of claim 3, wherein associating the categories includes:
associating the categories with weights based on the values of measures of difference associated with the categories.

PATENTS

Attorney Docket No. CEO-012.02

5. (Currently amended) The method of claim 3, wherein associating the categories includes:
associating categories having larger values of measures of difference with greater weights than categories having smaller values of measures of difference.
6. (Original) The method of claim 3, wherein generating a performance measure further includes:
normalizing the sum of the products.
7. (Original) The method of claim 6, wherein normalizing includes:
normalizing the sum of the products based on one of: the number of test input data elements and a reciprocal of a logarithm of the number of test input data elements.
8. (Original) The method of claim 1, further comprising:
training the data classifier, and
based on comparing the performance measure with a threshold, retraining the data classifier.
9. (Original) The method of claim 1, wherein the test data are based on telecommunications data.
10. (Original) The method of claim 1, wherein the data classifier includes a neural network.
11. - 16. (Cancelled)
17. (Currently amended) A ~~processor program~~ computer product for operating a data classifier, the ~~processor program~~ computer product disposed on a ~~processor~~ computer-readable medium and comprising instructions to cause a processor to:

FHBOSTON/1101851.2

PATENTS
Attorney Docket No. CEO-012.02

receive test data including test input data elements and corresponding test output data elements,

receive result output data elements generated by the data classifier based on the test input data elements,

generate measures of difference based on differences between each test output data element and each corresponding result output data element, and,

associate the measures of difference with categories corresponding to different values of measures of difference, and

based on the number of measures of difference associated with the categories, generate a performance measure of the data classifier.

18. (Cancelled)

19. (Currently amended) The ~~processor-program~~ computer product of claim 18 ~~17~~, wherein the instructions to generate a performance measure further include instructions to cause the processor to:

associate the categories with weights,

for each category, generate a product based on the weight and the number of measures of difference associated with the category, and

generate a sum of the products.

20. (Currently amended) The ~~processor-program~~ computer product of claim 19, wherein the instructions to generate a performance measure further include instructions to cause the processor to:

normalize the sum of the products based on one of: the number of test input data elements and a reciprocal of a logarithm of the number of test input data elements.

21. (Currently amended) The ~~processor-program~~ computer product of claim 17, further comprising instructions to cause the processor to:

FHBOSTON/1101851.2

PATENTS
Attorney Docket No. CEO-012.02

train the data classifier, and
based on comparing the performance measure with a threshold, retrain the data classifier.

22. (Currently amended) The ~~processor program~~ computer product of claim 17, wherein the test data are based on telecommunications data.

23. (New) A system for operating a data classifier, the system comprising:

an input receiver operable to receive test data, including test input data elements and corresponding test output data elements,

a data classifier operable to generate result output data elements in response to test input data elements,

a difference generator operable to determine a measure of difference between each test output data element and each corresponding result output data element,

a data association manager operable to associate the measures of difference with categories corresponding to different values of measures of difference, and

a performance measure generator operable to generate a performance measure of the data classifier based on the number of measures of difference associated with the categories.

24. (New) The system of claim 23, wherein the performance measure generator is further operable to:

associate the categories with weights,

for each category, generate a product based on the weight and the number of measures of difference associated with the category, and

generate a sum of the products.

25. (New) The system of claim 24, wherein the performance measure generator is further operable to normalize the sum of the products based on one of: the number of test input data elements and a reciprocal of a logarithm of the number of test input data elements.

FHBOSTON/1101851.2

PATENTS
Attorney Docket No. CEO-012.02

26. (New) The system of claim 23, the system further comprising a data classifier trainer operable to:

train the data classifier, and

based on comparing the performance measure with a threshold, retraining the data classifier.

27. (New) The system of claim 23, wherein the test data are based on telecommunications data.